EUMESOGRAMMUS SUB-BIFURCATUS *Gill* ex *St.*

Pholis sub-bifurcatus *Storer*, Rep. 63; Syn. 118.
Stichæus sub-bifurcatus *Gill*, Cat. 45. (Storer, Putnam, &c.)

Hab.—Massachusetts, Maine, Nova Scotia, &c., and Newfoundland.

Especially distinguished from *E. præcisus* by the absence of the abdominal lines, and the continuance of the median lateral one to the base of the caudal fin.

Notes on SHELLS, with descriptions of new fossil Genera and Species.

BY T. A. CONRAD.

NOETIA, Gray.

N. PONDEROSA, Say, occurs abundantly in the Post-Pliocene of the Southern States, and lives on the southern coast of Florida. Specimens have lately been received from Pensacola, and are in the cabinet of the Academy. It is unknown in the Mioeene, the shell I referred to as a variety being a distinct species.

TURRITELLA, Lam.

T. PRÆCINCTA. Turrited, broad at base; sides straight, a profoundly elevated, thick, angular carina revolves at the summit of each volution, gradually disappearing at the fourth whorl; carina slightly channelled above, and having a single revolving line beneath near its junction with the whorls, which have each three revolving lines, the inferior one most prominent. Length $3\frac{5}{8}$ inches; width of body whorl, independent of carina, $\frac{3}{4}$ inch.

Locality. Dallas Co. ? Alabama. Eocene.

This large species differs from *T. Mortoni* in having a larger and more abruptly elevated carina, larger and fewer revolving striæ, &c. It is allied to *T. rotifera*, Lam. The specimen described was loaned for the purpose by Mr. R. P. Whitfield. Other specimens are in Barnum's Museum, N. Y.

PROTOCARDIA, Beyrich.

P. VIRGINIANA. Cordate, subtriangular, inequilateral, ventricose, thin; radiating lines minute; anterior upper margin very oblique, slightly emarginate, posterior side slightly produced, the margin obliquely truncated; post-umbonal area densely tuberculated on closely arranged striæ; posterior cardinal tooth small, tubercular. Height $1\frac{1}{2}$ inch; length 1 2-5ths inch.

Locality. Pamunkey River, Virginia. Mr. Ruffin.

This species is smaller and proportionally longer than *P. Nicolleti*, with a smaller umbo, &c. This is the third Eocene species of *Protocardia* found in the United States. There are two species in the American Cretaceous rocks. The genus did not survive the Eocene fauna.

ECPHORA 4-COSTATA, Say.

Lister's figure 1059, fig. 2, represents a rare variety of this species, without umbilicus. I found one such specimen. Dillwyn erroneously refers Lister's figure to a variety of *Buccinum scala*. The shell is very peculiar in substance, resembling horn. The umbilicus, though generally enormously large, is sometimes moderate. The range of this species is from New Jersey to South Carolina, inclusive.

FASCIOLARIA, Lam.

F. SUBTENTA. Fusiform; volutions 7; body whorl ventricose, penultimate subangulated, the others angular below the middle, tuberculato-costate; surface rugoso-striate; lines alternate on the spire, irregular on the body whorl, many of them thick and prominent; minute, rugose, longitudinal lines ornament the whorls; outer lip ribbed within, the ribs divided towards the

interior; plait on the columella acute, bounded on either side by a furrow. Length $5\frac{1}{8}$ inches; width $2\frac{3}{4}$ inches.

Locality. Natural Well, Dauphin Co., N. C.

FASCIOLARIDÆ?

LIROSOMA, Conrad.

L. CURVIROSTRA. Subfusiform; volutions 6; spire prominent; ribs rounded, revolving, six on the sides of the two larger whorls of the spire, and one on the flat upper surface; about 21 on the body whorl with a fine intermediate line; surface of the shell finely wrinkled longitudinally; aperture patulous; base of columella rounded; fold obsolete; beak long and twisted.

Locality. North Carolina?

A larger species than *L. sulcosa*, and differing in having a longer and twisted beak, more prominent and acute spire, and in wanting the longitudinal furrow or coarse lines, &c.

ERYCINELLA, Conrad.

E. OVALIS, Conrad. Having obtained several specimens of this Miocene fossil since the description was first published, I find, on comparison with the English shell sent me by S. V. Wood, that it is a distinct species from the latter.

Mr. Stimpson also made the comparison in my presence, and came to the same conclusion. The error, therefore, in the Monograph of the Crag Mollusca is mine.

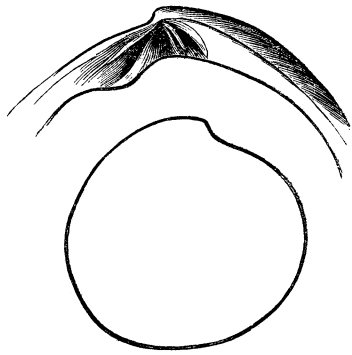
CYPRINIDÆ.

CYPRIMERIA.

Lentiform; hinge of right valve broad, with a bifid oblique cardinal tooth under the apex, and two oblique acute anterior teeth, with an intermediate pit for the reception of the tooth in the opposite valve.

CYTHEREA EXCAVATA, Morton.

Only one valve has been obtained showing the hinge, and the exterior markings, which consist of very fine concentric lines on the umbo and wrinkled lines of growth on the other parts. There is no cartilage pit. Behind the bifid tooth is a slightly raised plate rugoso-striate. The muscular impression unknown. Found at Arneytown, N. J., in Cretaceous marl.



Cyprimeria excavata.

DOSINIOPSIS.

Equivalve, lentiform; hinge with three cardinal teeth in each valve; posterior tooth of right valve bifid; in the left valve a thick rugose lateral tooth fitting into a cavity in the opposite valve; under the apex is a pit or cavity; cartilage plate granulated; pallial sinus deep and angular.

Exteriorly the shells of this genus resemble *Dosinia*; and the pit under the apex and the form of the pallial impression are similar, but the anterior, thick, rugose cardinal tooth, the posterior hinge channel and tooth-like plate, and the muscular impressions ally it most nearly to *Venilia* and *Cyprina*.

Venus lineolatus, Sowerby, has a hinge character nearly allied to, if not identical with, this genus.

D. MEEKII. Short ovate, ventricose, moderately thick, inequilateral; anterior margin regularly rounded; posterior dorsal margin elongated, rounded, very oblique, the extremity subangulated; apex prominent; basal margin profoundly curved; lunule obsolete, or defined by an obscure line; surface without other lines than those of growth. Height $1\frac{7}{8}$ inch; length $1\frac{3}{4}$ inch.

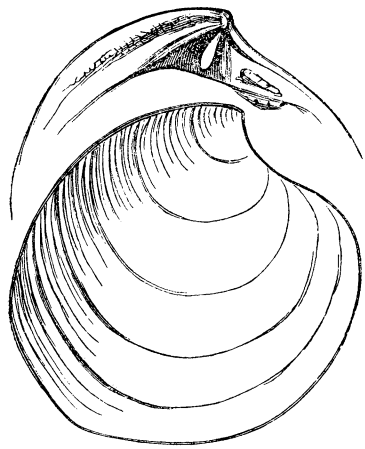
Locality. Six miles east of Washington, D. C. Meek.

Proportionally more elevated and convex than *D.* (*Cytherea*) *lenticularis*, Rogers.

A singular feature of this shell is a tuberculated callus under the anterior cardinal plate, which occurring in 4 valves must be characteristic of the species. It has the appearance of having grown up from the inner surface of the valve and folded over the under side of the hinge plate.

Mr. Meek found this species abundantly in a dark grey quartzose sand, six miles east of Washington, D. C., in company with other new univalves and bivalves. *Cytherea lenticularis*, Rogers, belongs to the genus *Dosiniopsis*, and more closely resembles *Dosinia* exteriorly. Both characterize the oldest portion of the American Eocene which has yet been observed.

This genus, like the preceding, is remarkable for uniting the characters of two families, *Cyprinidæ* and *Veneridæ*, which are obviously distinct in the recent shells.



Dosiniopsis Meekii.

RADIOLITES, Lam.

Subgenus TAMIOSOMA, Conrad.

R. GREGARIA, Conrad. Explorations and Surveys for Rail-road route to Pacific, vi. 72, iv. 18. This fossil is characteristic of the Cretaceous formation in California.

October 4th.

MR. LEA in the Chair.

Eighteen members present.

The following papers were presented for publication:

"On a blind Silurid from Pennsylvania," and "On the Characters of the higher groups of Reptilia squamata, &c." By E. D. Cope.

October 11th.

DR. BRIDGES, Vice-President, in the Chair.

Fifteen members present.

October 18th.

DR. MCEUEN in the Chair.

Nineteen members present.

The following paper was presented for publication: "Fasti Ornithologiæ." No. 1. By John Cassin.

October 25th.

DR. BRIDGES, Vice-President, in the Chair.

Fourteen members present.

On report of the respective committees, the following papers were ordered to be published:

Synopsis of the PLEURONECTOIDS of the Eastern Coast of North America.

BY THEODORE GILL.

In the present brief article, an analytical synopsis distinguishing the genera of east coast *Pleuronectoids*, already named, is submitted, and the different names under which the species have been described are referred to the synonymy of the species to which they are supposed to belong; and, in one case, (*Reinhardtius hippoglossoides*) where the decision of the synonymy would involve the nomenclature and geographical distribution of two widely distinct forms, the synonymy has been quite fully discussed. If the premises taken are correct, the genera herewith enumerated are the only known forms as yet entitled to a place in the Fauna of the East Coast. If, on the other hand, that view against which I have contended is the true one, the genus *Glyptocephalus*, an ally of *Pleuronectes*, must be added, and the name *Reinhardtius hippoglossoides* replaced by another.